

## Melchior Palágyi: Der Gegensatz von Geist und Leben. Schriften zur schöpferischen Verbindung von Erkenntnistheorie und Vitalismus.

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**Abstract.** Like no other, the Hungarian psychologist and philosopher Melchior Palágyi recognized the power of imagination not only as a prerequisite for the ability to imagine and think, but also as a fundamental condition for movement and perception. With the original theory of the “virtual imagination”, Palágyi’s ideas inspired Philosophical Anthropology and medicine after his death. Today, however, he and his theory seem to have been forgotten. The following review is therefore dedicated to the work “Leben und Geist” (Life and Spirit), edited by Heiko Heublein and published in 2018, which is a representative cross-section of Palágyi’s work. The review focuses on his reflections on the theory of perception, which are the core not only of the anthology, but of his oeuvre. The most important cornerstones of Palágyi’s theory of perception are the “theory of intermittent perception” and the “virtual imagination”.

“It is an unparalleled wonder that life, without abandoning the place where it occupies, can nonetheless behave as if it has escaped to another place in space and time”<sup>1</sup> (p. 27), is the fundamental statement of a book hardly known today with the short title *Theory of Perception*. The author was the Jewish Hungarian philosopher Melchior Palágyi (1859–1924). This astounding ability to overcome physical limits is what Palágyi calls virtual imagination. Philosopher Ludwig Klages, his most loyal follower, celebrated this process as a phenomenal discovery, which reveals an original theory of perception.

Today, Palágyi plays only a minor role, if any, in the debates on perception theory. His name does not appear even in a historical account of cognitive psychology.<sup>2</sup> Hungarian academic philosophy too has long been indifferent: almost dismissive

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1 “Es ist ein Wunder ohnegleichen, daß das Leben, ohne von der Stelle zu weichen, wo es sich befindet, sich trotzdem so verhalten kann, als ob es an eine andere Stelle des Raumes oder an eine andere Stelle der Zeit entwichen wäre.”

2 Toepfer, “Biologie und Anthropologie der Wahrnehmung,” 13.

of him.<sup>3</sup> Nevertheless, beyond Klages, in particular the representatives of Philosophical Anthropology incorporated the concept of virtual imagination into their own theories (p. 31). Along with Max Scheler, Frederik Buytendijk, Erich Rothacker and Helmuth Plessner, it was above all Arnold Gehlen who, in his major work *Der Mensch Seine Natur und seine Stellung in der Welt*, recognized a fixed point of reference in Palágyi's thinking and re-contextualized his theses.<sup>4</sup> After all, it was Palágyi who, unlike almost all preceding theorists, had emphasized the central role of motion for perception.<sup>5</sup>

In view of the importance of perception theory and the obvious discrepancy between prominent advocacy on the one hand and the complete absence of a broad reception on the other, it is all the more gratifying that, thanks to the anthology published in 2018 with the programmatic title *Der Gegensatz von Geist und Leben*, central texts of Palágyi's work have finally become accessible again. Until now these texts were only available in antiquarian bookshops. Some of them, indeed, had never been published.

Considering the fact that Palágyi's impressive work had sunk out of sight in the past, it is not surprising that the book opens with two contributions. In the first preface Christian Möckel presents Palágyi's works in the fields of natural science, psychology and philosophy and discusses the attention Palágyi received from some philosophers of his time. The second introduction, by the editor Heiko Heublein, is nineteen pages long; unusually extensive and detailed, and begins with the interesting story of Palágyi's life. Furthermore, the editor provides a clear and concise introduction to Palágyi's theory of perception. Its basic concepts are *intermittent consciousness* and *virtual movement* resp. *virtual imagination* (p. 120, pp. 139–70). In this context Heublein focuses on central key terms of Palágyi's work such as *polarity*, *vitality*, *sensation*, *feeling* and *virtual imagination* (pp. 21–28). Finally, special attention is paid to Ludwig Klages, who gave greater recognition and praise than anybody else to the originality and breadth of Palágyi's contribution to philosophy.

## Essays by the young Palágyi

The first section is a compilation of Palágyi's essays on various topics, which give the reader a first impression of his ideas. One is struck by the clear, transparent language that many German philosophers of that time lacked. The introspection that Palágyi describes in the first essay, *Insichgehen*, leads to the awareness of our individuality and thus to our loneliness. Everyone has his very own world, which

3 Pöhlmann, *Philosophie*, 512.

4 Fischer, *Philosophische Anthropologie*, 166.

5 Walther, *Zur Theorie der virtuellen Bewegung*, 179.

no one else can enter. The clarity of Palágyi's language can also be found in his meditations on the philosopher Kant and Calderón's drama *Leben ein Traum* as well as in the essay *Aufeinanderfolge von Schlaf- und Wachzuständen* (p. 65).

In his reflections *Über den Philosophischen Pessimismus und Optimismus* Palágyi reveals more critical questions. He criticizes the *fatal separation* of mind and life as well as the overestimation of human spirit, which had begun with Descartes' ideas (pp. 53–56): If the French philosopher, when he spoke his *cogito*, also made *vivo* in an essential condition for the *cogito*, the *fatal separation* of mind and life, which Palágyi also calls the “basic evil of the modern world view,” would not have occurred (p. 53). The statement “I feel, therefore I live,” should be accorded equal rank with the statement “I think, therefore I am” (p. 53).

## Polarity and the Creative

Polarity and creative power are the topics of the second section. Armin Müller, a physiologist close to Philosophical Anthropology, emphasizes that the idea of polarity has always contributed important impulses to philosophical thinking. Above all, Goethe's ideas about animate and inanimate nature, visible and invisible, are based on the concept of polarity. In the unfolding of the One into opposites and the reunification of what has been separated into a new unity the Philosopher Schelling also recognizes a general law of essence.<sup>6</sup> The physiologist Buytendijk defines it as follows:

So polarity is the structure of a concrete given something, in which two opposite but mutually determining directions are effective. These opposites are only in their being together. Their in themselves opposing unity forms the structure of the concrete object.<sup>7</sup>

Palágyi places his work in the romantic tradition (p. 81). In contrast to Descartes' epistemology he believes that the root of all human abilities lies in polarity (p. 80). He pays particular attention to both polar forces, the vital and the mental, that are connected to form an *I*. The vital force transfers the sensations from the outside world unconsciously into a structured context. The mental act of consciousness makes one aware of these internal processes. Their cooperation enables the perception of the outside world (p. 80). The mind has only a subordinate function here. In contrast, it plays the primary role in all thinking, values and will (p. 81f).

6 Müller, *Grundkategorien des Lebendigen*, 147.

7 “Polarität ist also die Struktur eines konkret gegebenen Etwas, in der zwei gegensätzliche aber einander gegenseitigbestimmende Richtungen wirksam sind. Diese Gegensätze sind nur in ihrem Zusammensein. Ihre in sich gegensätzliche Einheit bildet die Struktur des konkreten Objektes.” Buytendijk, *Allgemeine Theorie*, 65.

## Theory of perception

Palágyi does not ascribe the ability to put sensory data into an orderly context, to the *mind*. This has far-reaching consequences for his theory of consciousness. According to him, the structuring of incoming data can only happen in a *vital process* before the mind intervenes, or before conscious awareness occurs. Three vital processes form the basis here: *sensations*, *feelings* and *virtual imagination*. Perception requires the unconscious interaction of these three vital processes. *Sensation* is limited to qualities of objects such as color, temperature or outline from the outside world. *Feeling*, on the other hand, is conveyed by the vitality of one's own body (p. 27). "Only the non-living is sensed, only life is felt" (p. 164). The *virtual imagination* has a moderating influence. It has a stimulating and at the same time an ordering effect on sensations and feelings. Without these three vital processes, neither spatial perception nor perception of shapes is possible (p. 90, pp. 139–70). They must interact before the mind intervenes—then conscious perception can occur (p. 21, 116).

The theory of consciousness, which is based on the polar forces of mind and life and in which the three vital processes interact, is contrary to the theory of sensory perception of English sensualism. The sensualists Locke, Berkley and Hume developed the idea that perception and cognition are based exclusively on sensations (p. 93, 105, 107, 145, 135). The position of the English sensualists has become a dogma of all modern psychology, which Palágyi vehemently criticizes (p. 107). Palágyi repeatedly points out that mind should not be equated with vital processes.

## Intermittent awareness and sense of time

In contrast to the sensualists, Palágyi assumes that sensations represent a continuous stream (pp. 5–96). Conscious perception, however, does not keep pace with this flow of sensations (p. 116): rather, perceptual consciousness has an intermittent character. However, we are subject to the illusion that it is uninterrupted (pp. 117–18). While sensations continue to flow, the human mind moves jerkily from one act of perception to another. In this sense Palágyi speaks of a pulse of consciousness and the resulting perception (p. 118). The perceptual acts have a certain frequency, which can be investigated experimentally (pp. 122–23).

These considerations were not new: In his classic essay *Die Abhängigkeit unseres Weltbildes von der Länge des Moments* the Russian physician and biologist Karl Ernst von Baer had speculated about the world view dependent on the smallest still perceptible unit of time. With these speculations Baer had opened the door to alternative, almost fantastic worlds of perception. His investigations anticipated

the cinematographic technique with its possibilities of stretching and gathering.<sup>8</sup> These ideas of the mental pulses and their effect on perception had a strong influence on Palágyi's work.<sup>9</sup> Finally they found their way to European research laboratories. 1951 the Swiss biologist Adolf Portmann presented a large number of empirical findings in his essay *Die Zeit im Leben der Organismen*,<sup>10</sup> which describes how living interacts with time. The smallest still perceptible unit of time of a snail is 1/4 second and thus includes far fewer impressions compared to the 1/16-second pulse of a human being. By the way, the fighting fish has a unit of about 1/30 second. That means that the unit of time of the fighting fish contains significantly more impressions than that of humans.

However, the theory of intermittent perception is not sufficient in itself to establish a theory of consciousness. Therefore Palágyi completes the theory with his principle of the relation between two acts of consciousness. According to him, a single act can never have a consciousness of itself (pp. 125–33). Only a second, later act can give the previous one consciousness. Every human perception is rather a delayed perception. We live in the illusion that we can master events in front of us with the present moment (*Jetztblick*) of our consciousness and we “[...] do not realize that even with the highest attention we can never catch a real now”.<sup>11</sup>

### Virtual fantasy – virtual movement

In addition to the theory of intermittent consciousness, thanks of Heublein's anthology the reader is introduced to the outstanding concept of an all-controlling instance—that of *virtual movement* resp. the *virtual fantasy* (pp. 139–70). When we speak of imagination, we associate waking reverie or poetic-artistic fantasies. For Palágyi, however, *virtual imagination* is essential. It is the universal prerequisite for all references to the world and all perception (pp. 145–70).<sup>12</sup> This is why he calls the process of imagination the “highest development of the vital” (p. 161). Palágyi developed his theory of virtual imagination with regard to feelings, sensations and consciousness in constant dialogue with some contemporary psychologists and physiologists. The individual investigations have one thing in common: they all revolve around the key concept of movement. Wherever imagination is involved, there must be movement (pp. 145–70).

8 Bühler and Rieger, *Vom Übertier*, 222.

9 Palágyi, *Naturphilosophische Vorlesungen*, 31.

10 Portmann, *Biologie und Geist*, 144–45.

11 Palágyi, *Wahrnehmungslehre*, 33.

12 Kasparowicz and Rieger, *Handbuch Virtualität*, 5.

Sensations alone do not enable us to recognize a shape. They only stimulate our imagination. The mediator between the sensory sensations and conscious perception, however, is the virtual imagination. “It is only this imagination that lets us grasp the shape” (p. 147). To illustrate this, Palágyi repeatedly uses everyday examples, which are comprehensible to the reader. The outlines of a cup are perceived by covering its opening with the hand. However, the shape of the cup rim is not perceived by sense of touch. This sense of touch rather stimulates the *virtual imagination*, which makes an *imaginary resp. virtual movement* around the cup rim and so one can grasp its spatial outline. Furthermore, virtual movement plays a role not only for tactile perception, but for any kind of perception (p. 147). According to Palágyi every perception is a *virtual grasping* and *touching* of the object.<sup>13</sup>

But the mere grasping of a place in space, the mere relocation of a thing or a process to any spatial location would be impossible, if we were not able to point to the place in question through real and imagined movements (p. 144).<sup>14</sup>

Palágyi is convinced that the sensory processes do not only stimulate our imagination—vice versa, the imagination affects the sensations. That is why he describes *virtual movement* as a “sensation-awakening” process (p. 164). The induced sensations are just as real as those caused by the sensory impression.<sup>15</sup> If in our imagination, we bring a piece of lemon to the mouth, we do feel an acid-like sensation. The anticipated act of biting by the virtual movement induces a sensation of citric acid (p. 163).

At first glance, there seems to be no difference between a virtual movement and the idea of this movement. The phantasm of movement is, as Ludwig Klages emphasizes, not a real movement, and certainly not the idea of a movement and must be distinguished from the usual “urge to move” (p. 27). The imagined movement is not a conscious mental operation, not a cognitive act, though it is based on a real nervous process (p. 156).<sup>16</sup>

## Primacy of the sense of touch

Palágyi’s theory of perception is difficult to access, because he focuses his analyses primarily on the development of tactile perception, the ability to perceive objects through

13 Kehl, *Die Bildung der Vorstellung*, 176.

14 “Aber das bloße Erfassen eines Ortes im Raum, das bloße Verlegen eines Dinges oder eines Vorganges an irgendeine räumliche Stelle wäre unmöglich, wenn wir nicht imstande wären, durch wirkliche undeingebildete Bewegungen auf den betreffenden Ort hinzuweisen.”

15 Kehl, *Die Bildung der Vorstellung*, 179.

16 Palágyi, *Naturphilosophische Vorlesungen*, 124; Kehl, *Die Bildung der Vorstellung*, 178.

the sense of touch. We often believe that there exist only *visual phantasy* or *facial phantasy*. Palágyi, however, regards the tactile imagination (*Tasteinbildung*) as the decisive precondition for the development of our entire fantasy life (p. 142). Tactile imagination is bound to movable organs and limited to the surroundings of humans.

This unusual consideration starts by comparing sighted people with those born blind (pp. 140–41). If someone who was born blind runs his hand over a tabletop, he is only able to grasp the tabletop as square, because at the same time he makes a virtual movement with his hand (p. 143). The contours of the objects are only revealed to the blind by imagined tactile movements. While blind people move and make contact with things, their tactile imagination enjoys autonomy in their own surroundings. Tactile and visual imagination are inseparably linked (p. 141). However, for persons endowed with a sense of sight, this tactile imagination is often withered by the visual representation.

For sighted people, the fantasy of touch does not only support the visual or *facial fantasy*, but vice versa: the facial fantasy supports the fantasy of touch. In the eyes of Palágyi the sense of touch is the vital foundation of all other senses and thus the foundation of all perception (p. 143). All in all Palágyi emerges as haptically oriented. His work can be read in the light of the debate about a hierarchy of human senses, which was established in psychology, philosophy and art theory by representatives like Gottfried Herder, Alois Riehl, Hermann Friedmann, Wilhelm Wundt and Helmuth Plessner.<sup>17</sup>

One central thesis underlying his theory of virtual fantasy is the phenomenon of “passive-active dual sensation” (*passiv-aktiven Doppelempfindung*). According to Palágyi the sense of touch is constitutive to obtaining perception and knowledge of an external world.<sup>18</sup> The tactile sensation of a person is the only sensation which induces both: foreign- and self perception.<sup>19</sup> If we touch a foreign body with our hand, the sensation is composed of two opposing phases: for a short moment the hand is active. During this active phase we feel the foreign body. In the next moment, however, the hand is put in a passive state, so that it feels itself being pressed by the foreign body.<sup>20</sup> These opposing phases enable us to perceive not only the outside world but also ourselves.<sup>21</sup> This conclusion is not only to be found in the treatise of the philosopher Maurice Merleau-Ponty; Gehlen too included Palágyi’s analyses about the “passive-active dual sensation” (p. 184) in his major work.<sup>22</sup>

17 Friedmann, *Die Welt der Formen*, 96.

18 Palágyi, *Naturphilosophische Vorlesungen*, 116.

19 Walther, *Zur Theorie der virtuellen Bewegung*, 201.

20 Palágyi, *Naturphilosophische Vorlesungen*, 135–36.

21 Palágyi, *Naturphilosophische Vorlesungen*, 117, 201.

22 Gehlen, *Der Mensch*, 167.



This important phenomenon of double sensation in connection with the distinction of the “I” from the outside world could have received more space in Heublein’s selection of texts. The interested reader should take a closer look at Palágyi’s lectures in his work *Naturphilosophische Vorlesungen*.

### Virtual fantasy and self control

Another phenomenon related to virtual imagination is the development of controlled movements, which plays an important role in the development of infants. In the earliest stage the infant is only able to move its hands aimlessly back and forth. If the infant remained in this state perception would never occur. “[...] who never is master of his movement, can never find anything and cannot put anything in one place [...]”.<sup>23</sup> “But”, one wonders, “how do the random eye movements of the infant become a steerable and then also self-directing gaze?” “And how does the formless back and forth movement of the hands become a gradually forming, purposeful movement?” Palágyi’s answer here is concise: The aimless movements must develop gradually into controlled movements through *virtual fantasy* resp. *virtual movements* (p. 156).

This fundamental concept of controlling the *real movement* by the *virtual movement* associated with sensory-motor circular processes had a sustainable impact on Philosophical Anthropology.<sup>24</sup> In his book “*Wege zum Verständnis der Tiere*” the Anthropologist Buytendijk discusses for example the following situation: When crossing a road, the totality of objects, distances and real movements enter into an act of perception, which depends on the activity of the subject. In this act, which contains *virtual movements* to the highest degree, the future of each real movement is predetermined for the next moment. The physiologist emphasizes that this future action is not an idea outside the flow of life, but it is only formed by the respective situation without consciousness.<sup>25</sup> Besides Buytendijk, Gehlen too draws attention to the anticipatory-constructive competence of the imagination, which he calls the “flywheel of action” (*Schwungrad der Handlung*).<sup>26</sup>

Gehlen focuses on what he calls the “anticipated response behavior of the manners” (*vorweggenommene Antwortverhalten der Umgangsdinge*).<sup>27</sup> He explains this phenomenon using the example of fine motor movements: if the skilful physician operates in body cavities without seeing, he only palpates with the tip of the

23 “[...] wer niemals Herr seiner Bewegung ist, der kann auch niemals etwas finden und nichts Empfundenes an irgendeinen Ort verlegen [...]”

24 Fischer, *Philosophische Anthropologie*, 170.

25 Buytendijk, *Wege zum Verständnis der Tiere*, 243.

26 Thies, *Arnold Gehlen zur Einführung*, 112.

27 Gehlen, *Der Mensch*, 1971, 170.



probe or scalpel. In this context, Gehlen speaks of pre-designed virtual tactile sensations that *would follow* the fine movements. To make this special phenomenon more understandable, the anthropologist mentions another example: If, with closed eyes, one brings a knife towards the skin of the forehead, one can clearly feel the imaginary sensation which already responds to the imagined continuation of the movement. Such anticipations of expected sensations can already be observed in children. If the grasping movement of a child fails, it will attentively observe its fingers, because it expected a touch—but that did not occur. Every movement is linked with expectations. In his analysis Gehlen also describes the phenomenon of “anticipated response behavior” as the “nerve of all final, purposeful activity”.<sup>28</sup>

The illustrative examples of motion control offer possibilities for comprehending Palágyi’s concept of virtual motion. The practice of a musical instrument starts with unfamiliar movements. The *virtual movement*, which must first be practiced in order to guide the subsequent real movement, becomes more and more active (pp. 156–57). Finally *virtual steering* grows increasingly unconscious and gains the character of an *automated movement* or *automated imagination*. The more our movement becomes habitual, the less it needs to be initiated and guided by a deliberate decision. This does not mean, however, that virtual movement does not play a role. Without virtual control, the automated movement would fall back to the level of an infant’s (pp. 156–57). Palágyi and Gehlen declare *virtual imagination* to be a basic human competence. Without it, it would be impossible to pass through the first stages of ontogenetic development, in which sensory perception and movement coordination are developed.<sup>29</sup>

### Palágyi’s theory on the test bench

While reading the book questions arise repeatedly about the empirical foundation of Palágyi’s theses. Palágyi himself was unable to confirm his theory of consciousness because he lacked the institutional prerequisites for this. Nevertheless, he was constantly trying to find other experiments to confirm his hypothesis.<sup>30</sup> Only after his death were attempts made on the neurological side to do justice to the importance of virtual movement. Among others the physiologist J. Buytendijk, who headed the first laboratory for animal physiology in Europe, examined Palágyi’s theories experimentally. Together with the animal psychologist Werner Fischel he performed a series of experiments on sighted and blind rats in a labyrinth. The experiments were intended

28 Gehlen, *Der Mensch*, 184.

29 Thies, *Arnold Gehlen zur Einführung*, 111.

30 Walthes, *Zur Theorie der virtuellen Bewegung*, 242–43.

to test whether the control of action takes place through imaginary movement.<sup>31</sup> In addition, the series of experiments conducted by the Heidelberg physician Prince Auersperg should not remain unmentioned. Auersperg, who belonged to the close circle around the physician Viktor von Weizsäcker, had tried to connect virtual steering to the phenomenon of “prolepsis”. Prolepsis includes an anticipatory act that does not occur in response to external stimuli and is similar to Palágyi’s virtual movement.<sup>32</sup>

## Space-time

The fourth and last section is dedicated to Palágyi’s metabiological basic concepts with which, as a mathematician and logistician, he established a new theory of space and time. He developed a model that combines the three space dimensions together with time to form the four-dimensional space-time. Although there were certain formal similarities to the space-time of Henri Poincaré and Hermann Minkowski, it lacked the essential features of the theory of relativity: the central role of the speed of light and the dependence of the four quantities on the respective reference system which is described by the Lorenz transformation. Accordingly, Palágyi’s model was decisively rejected by contemporary physicists such as Max Born on the grounds that it had nothing in common with relativity theory.

## Summary

To conclude, we can say that, because Palágyi’s theory of space and time has found its way into Heublein’s compilation, the reader is given a comprehensive overview of the philosopher’s broad range of topics. “Melchior Palágyi’s significance ultimately lies in his persisting effort of bringing to light the sub-rational, unconscious capacities of the body and of considering them equal in importance to the rational faculties of the mind.”<sup>33</sup> With the present anthology Heublein has succeeded in providing a representative cross-section of Palágyi’s work. Above all, the latter’s theory of virtual movement deserves to be rediscovered. Along with Wilhelm Roux’s concept of vital *self-regulation*, Wolfgang Köhler’s *Gestaltpsychology* and Jakob von Uexküll’s *Umweltlehre*, Palágyi’s theory of perception is an important concept in Philosophical Anthropology.<sup>34</sup> Today, more than hundred years after the appearance of Palágyi’s original theory of perception, it seems, following the scholar

31 Buytendijk and Fischel, “Versuche über die Steuerung der Bewegungen,” 63–96.

32 Sack, *Von der Neuropathologie zur Phänomenologie*, 72; Auersperg and Buhrmester, “Experimenteller Beitrag,” 274–76.

33 Csepregi, “Melchior Palágyi’s Theory of Imagination,” 129–31.

34 Bühler, *Lebende Körper*, 154.

Renate Walthes, to be a mediating theory, more than ever, between neuroscience and educational science.<sup>35</sup> Moreover, Palágyi's theory could have an influence on contemporary embodiment discourse.

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35 Walthes, "Von Neurowissenschaftlichen Erkenntnissen," 125.

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